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10/034,785	12/27/2001	Lawrence J. Seigel	03237.0001U2	1344

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EXAMINER

WACHSMAN, HAL D

ART UNIT	PAPER NUMBER
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2857

DATE MAILED: 03/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

*Office Action Summary*

Application No.

10/034,785

Applicant(s)

SEIGEL, LAWRENCE J.

Examiner

Hal D Wachsman

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) 12-38 and 40-44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4, 7, 9.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

1. Applicant's election with traverse of species I (claims 1-11 and 39) on 12-11-03 is acknowledged. The traversal is on the ground(s) that claim 1 (species I) is generic to at least species III, IV, V, VI, VII and VIII. This is not found persuasive because MPEP 806.04(d), Definition of a Generic Claim, states:

“For the purpose of obtaining claims to more than one species in the same case, the generic claim **cannot include limitations not present in each of the added species claims**. Otherwise stated, the claims to the species which can be included in a case in addition to a single species **must contain all the limitations of the generic claim**”.

Applying the above to the comparison chart between claim 1 (species I) and claim 23 (species III) presented by the Applicant in the election reply, it is clear to see that claim 23 (species III) does not contain all the limitations of claim 1 (species I). For example, the limitation of claim 1 “the computing device computing a value in response to a predetermined association between chiller efficiency and the input chiller operating parameter measurement data” clearly is not found in claim 23 and therefore claim 1 cannot be considered to be generic to claim 23 (species III). Claim 25 (species IV) does not contain the claim 1 (species I) limitation “the computing device computing a value in response to a predetermined association between chiller efficiency and the input chiller operating parameter measurement data” and therefore claim 1 is not generic to species IV. Claim 28 (species V) does not contain the claim 1 (species I) limitation “the computing device computing a value in response to a predetermined association between chiller efficiency and the input chiller operating parameter measurement data”

Art Unit: 2857

and therefore claim 1 is not generic to species V. Claim 29 (species VI) does not contain the claim 1 (species I) limitation "the computing device computing a value in response to a predetermined association between chiller efficiency and the input chiller operating parameter measurement data" and therefore claim 1 is not generic to species VI. Claim 33 (species VII) does not contain the claim 1 (species I) limitation "the computing device computing a value in response to a predetermined association between chiller efficiency and the input chiller operating parameter measurement data" and therefore claim 1 is not generic to species VII. Claim 34 (species VIII) does not contain the claim 1 (species I) limitation "the computing device computing a value in response to a predetermined association between chiller efficiency and the input chiller operating parameter measurement data" and therefore claim 1 is not generic to species VIII.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 12-38 and 40-44 stand withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the election filed 12-11-03.

3. Two sets of drawings have been found the application. One set has sheet numbering starting at sheet 1 of 22 and the other set of drawings has sheet numbering starting at sheet 1 of 27. The Examiner first wishes to confirm that the set of drawings starting at sheet 1 of 27 is the Applicant's most recent set submitted for examination.

Assuming that this set whose sheet numbering runs up to sheet 27 is the set of drawings for examination, then the Examiner notes that this set is missing sheet 14 of 27 (believed to contain Figure 8-1 which is referred to in Figure 8). The Examiner also notes that there appears to be a duplicate Figure 10, sheet 16 of 27, in this set (i.e. there are two Figure 10 drawings). Appropriate explanation/correction is required.

4. Review of the application shows that the specification amendments requested by the Applicant in the Preliminary Amendment filed 5-10-02 were not entered into the specification before the paper file for the application was transformed into the current image file wrapper. Consequently, the Applicant is respectfully requested to resubmit those specification amendments, using the current 37 C.F.R. 1.121 rules for making specification amendments, in the reply to this Office Action.

5. The declaration indicates Lawrence J. Seigel as the original, first and sole inventor. However, the Office records for the claim for priority provisional application 60/291,248 indicate the inventive entity being both a Morgan Beard and Lawrence J. Seigel. Appropriate explanation/correction is required.

6. The Abstract is objected to because it is less than 50 words in length. Appropriate correction is required.

7. The Brief Description of the Drawings is objected to because there are no descriptions for Figures 5-1, 6D, 7-1, 8-1 (the missing drawing, see paragraph 3 above), 16A-1 and 17-1. In addition, the Brief states that Figure 11B is a continuation of Figure 12A however Figure 11B is a continuation of Figure 11A. The Brief states that Figure

16B is a continuation of Figure 16A however Figure 16B is a continuation of Figure 16A-

1. Appropriate correction is required.

8. The Examiner respectfully notes what appears to be a grammatical error on page 20, line 18: "whether Is the purge..."

9. Page 21, line 26, of the specification refers to Figs. 4-16 however in the drawings there is not a Figure 16 but rather Figures 16A, 16A-1 and 16B. Appropriate correction is required.

10. The use of the trademark Palm (see page 22, line 28) has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

11. The last page of the specification, last line, has "WHAT IS CLAIMED IS:". However, this should go above the first claim on the first page of the claims.

12. Claim 39 is objected to under 37 C.F.R. 1.75(a) for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. The preamble of claim 39 refers to a computer program product comprising a computer-usable data medium carrying thereon the various means cited in the body of the claim. However, as there is no reference to a program/set of instructions being executed it is not clear as written how the functionality of the computer program product is being realized. The examiner asks the applicant to better claim the limitation cited above.

While the examiner understands the intentions of the applicant he feels confusion could be drawn from the limitation cited above. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 1, 2, 4 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over McMullin (5,083,438) in view of Whiteside (6,438,981).

As per claim 1, McMullin (Abstract, col. 2 lines 2-8, col. 4 lines 58-68, col. 5 lines 1, 2) discloses "inputting chiller operating parameter measurement data into a computing device". McMullin (Abstract, col. 5 lines 28-36) discloses "the computing device computing a value.....between chiller efficiency and the input chiller operating parameter measurement data". McMullin (Abstract, col. 5 lines 31-36) discloses "the computing device comparing the computed value to a predetermined value to assess chiller efficiency". It appears though that McMullin does not clearly disclose the remaining features of this claim. However, Whiteside (Abstract, figures 2, 4-6, col. 9 lines 57-67) teaches "the computing device identifying a chiller component problem.....indicates a negative impact upon chiller efficiency". Whiteside (Abstract, figures 5-9, col. 10 lines 19-34) teaches "outputting an indication of a remedial action

associated with the identified problem". It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Whiteside to the invention of McMullin as specified above because as taught by Whiteside (col. 1 lines 58-61) there existed a problem with chiller monitoring systems not providing the communication of possible causes of, and potential solutions to, unsatisfactory conditions that are ascertained during the monitoring process and thus the techniques of Whiteside provided a solution to that problem.

As per claim 2, Whiteside (Abstract, figures 3, 4, col. 5 lines 13-19) teaches "a person reading instruments measuring chiller operating parameters" and "a person keying the chiller operating parameter measurement data into the computing device". It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Whiteside to the invention of McMullin as specified above because as taught by Whiteside (col. 1 lines 58-61) there existed a problem with chiller monitoring systems not providing the communication of possible causes of, and potential solutions to, unsatisfactory conditions that are ascertained during the monitoring process and thus the techniques of Whiteside provided a solution to that problem.

As per claim 4, McMullin (see at least abstract) discloses "electronic sensors measuring chiller operating parameters". McMullin (Abstract, figure 2, col. 2 lines 2-8, col. 4 lines 64-68, col. 5 lines 1, 2) discloses "the computing device reading the chiller operating parameter measurement data from the electronic sensors".



As per claim 39, McMullin (Abstract, col. 2 lines 2-8, col. 4 lines 58-68, col. 5 lines 1, 2) discloses "means for inputting chiller operating parameter measurement data into a computing device". McMullin (Abstract, col. 5 lines 28-36) discloses "means for computing a value.....between chiller efficiency and the input chiller operating parameter measurement data". McMullin (Abstract, col. 5 lines 31-36) discloses "means for comparing the computed value to a predetermined value to assess chiller efficiency". It appears though that McMullin does not clearly disclose the remaining features of this claim. However, Whiteside (Abstract, figures 2, 4-6, col. 9 lines 57-67) teaches "means for identifying a chiller component problem.....indicates a negative impact upon chiller efficiency". Whiteside (Abstract, figures 5-9, col. 10 lines 19-34) teaches "means for outputting an indication of a remedial action associated with the identified problem". It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Whiteside to the invention of McMullin as specified above because as taught by Whiteside (col. 1 lines 58-61) there existed a problem with chiller monitoring systems not providing the communication of possible causes of, and potential solutions to, unsatisfactory conditions that are ascertained during the monitoring process and thus the techniques of Whiteside provided a solution to that problem.

15. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over McMullin (5,083,438) in view of Whiteside (6,438,981) as applied to claim 1 above, and further in view of Key et al. (6,179,214).

As per claim 3, Whiteside (Abstract, figures 3, 4, col. 5 lines 13-19) teaches "a person reading instruments measuring chiller operating parameters". It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Whiteside to the invention of McMullin as specified above because as taught by Whiteside (col. 1 lines 58-61) there existed a problem with chiller monitoring systems not providing the communication of possible causes of, and potential solutions to, unsatisfactory conditions that are ascertained during the monitoring process and thus the techniques of Whiteside provided a solution to that problem. It appears though that the combination of references above still does not clearly teach the remaining features of this claim. However, Key et al. (see at least Abstract) teach "a person keying the chiller operating parameter measurement data into a portable handheld device". Key et al. (Abstract, figure 4, col. 4 lines 9-14) teach "the computing device receiving the chiller operating parameter measurement data via the handheld device". It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Key et al. to the inventions of McMullin and Whiteside as specified above because as taught by Key et al. (col. 4 lines 18-28) there was a problem in which a service person who was using a service module had to stand within reach of the control panel of the chiller. Because chillers are often much larger than the human beings who service them, a service person was often unable to both remain within reach of the control panel of the service module and observe operation of the part of the chiller in which he was interested. As a result, he often had to secure the assistance of a helper or improvise a way of working around this

Art Unit: 2857

difficulty. Both of these choices had the effect of reducing the overall efficiency and productivity of the servicing process. Thus, the techniques of Key et al. provided a solution to the above problem.

As per claim 5, McMullin (see at least abstract) discloses "electronic sensors measuring chiller operating parameters". It appears though that McMullin in view of Whiteside still does not clearly teach the remaining features of this claim. However, Key et al. (Abstract, figures 2, 3, col. 10 lines 27-32) teach "a portable handheld device reading the chiller operating parameter measurement data from the electronic sensors" and "the computing device receiving the chiller operating parameter measurement data via the handheld device". It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Key et al. to the inventions of McMullin and Whiteside as specified above because as taught by Key et al. (col. 4 lines 18-28) there was a problem in which a service person who was using a service module had to stand within reach of the control panel of the chiller. Because chillers are often much larger than the human beings who service them, a service person was often unable to both remain within reach of the control panel of the service module and observe operation of the part of the chiller in which he was interested. As a result, he often had to secure the assistance of a helper or improvise a way of working around this difficulty. Both of these choices had the effect of reducing the overall efficiency and productivity of the servicing process. Thus, the techniques of Key et al. provided a solution to the above problem.

Art Unit: 2857

16. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over McMullin (5,083,438) in view of Whiteside (6,438,981) as applied to claim 1 above, and further in view of Hull et al. (6,487,457).

As per claim 6, Hull et al. (Abstract, figures 4, 5, 20, col. 6 lines 57-67, col. 7 lines 1-7, col. 18 lines 3-8, col. 23 lines 48-51, col. 26 lines 57-67, col. 27 lines 1-3) teach the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Hull et al. to the inventions of McMullin and Whiteside as specified above because as taught by Hull et al. (col. 2 lines 30-34) there was a problem in the prior art of a building management system not facilitating integration of other needed data and services, such as remotely sending alarms to an email address of a building operator or owner to warn of detected problems with a particular piece of equipment in a particular building. The techniques of Hull et al. provided a solution to this problem in the prior art.

As per claim 7, as already shown in claim 1 above, Whiteside does teach the indication of a remedial action associated with the identified problem. However, McMullin in view of Whiteside do not clearly teach the remaining features of this claim. However, Hull et al. (Abstract, figures 4, 5, 20, col. 6 lines 57-67) teach these excepted features. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Hull et al. to the inventions of McMullin and Whiteside as specified above because as taught by Hull et al. (col. 2 lines 30-34) there was a problem in the prior art of a building management system not facilitating integration of other needed data and services, such as remotely sending

Art Unit: 2857

alarms to an email address of a building operator or owner to warn of detected problems with a particular piece of equipment in a particular building. The techniques of Hull et al. provided a solution to this problem in the prior art.

As per claim 8, Whiteside (Abstract, figures 5-9, col. 10 lines 19-34) teaches a provider of services associated with identification of a problem and outputting an indication of a remedial action associated with the identified problem and it is inherent in the art that a recipient of services would be billed for those services. In addition, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Whiteside to the inventions of McMullin and Hull et al. as specified above because as taught by Whiteside (col. 1 lines 58-61) there existed a problem with chiller monitoring systems not providing the communication of possible causes of, and potential solutions to, unsatisfactory conditions that are ascertained during the monitoring process and thus the techniques of Whiteside provided a solution to that problem.

17. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over McMullin (5,083,438) in view of Whiteside (6,438,981) and Hull et al. (6,487,457) as applied to claim 7 above, and further in view of Bitondo (4,483,152).

As per claim 9, although Hull et al. as shown in claim 7 above does provide a client/server communications structure that can be used to provide a selection menu to a client computer from a server computer the combination of Mullin, Whiteside and Hull et al. do not clearly teach though a user selecting a chiller from a plurality of chillers. However, Bitondo (Abstract, col. 4 lines 52-58) teaches this excepted feature. It

Art Unit: 2857

would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Bitondo to the inventions of McMullin, Whiteside and Hull et al. as specified above because as taught by Bitondo (see at least abstract) it would provide an optimum system coefficient of performance in meeting the requirement for a system capacity adjustment.

As per claim 10, Hull et al. (Abstract, figures 5, 20, col. 2 lines 65-67, col. 26 lines 57-67) teaches the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Hull et al. to the inventions of McMullin, Whiteside and Bitondo as specified above because an organization, such as a manufacturing installation, government installation, etc. may have a number of buildings that are geographically separated.

As per claim 11, Bitondo (see at least Abstract) teaches the feature of this claim. . It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Bitondo to the inventions of McMullin, Whiteside and Hull et al. as specified above because as taught by Bitondo (see at least abstract) it would provide an optimum system coefficient of performance in meeting the requirement for a system capacity adjustment.


18. The following references are cited as being art of general interest: Ozawa which discloses a remote maintenance system and method for chiller units, Lo et al. which disclose a process controller for chillers, Haley et al. which discloses optimizing and rating a variable speed chiller for operation at part load and Hebert which discloses a handheld wireless communication device for field personnel.

Art Unit: 2857

19. No claims are allowed.
20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal D Wachsman whose telephone number is 571-272-2225. The examiner can normally be reached on Monday to Friday 7:00 A.M. to 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Hal D Wachsman  
Primary Examiner  
Art Unit 2857

HW  
March 7, 2004